

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference ELTEP0131WO	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. PCT/US2004/014357	International filing date (day/month/year) 07.05.2004	Priority date (day/month/year) 07.05.2003
International Patent Classification (IPC) or national classification and IPC C25B11/04, C23C18/42		
Applicant ELTECH SYSTEMS CORPORATION		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> <i>(sent to the applicant and to the International Bureau) a total of sheets, as follows:</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</li> <li><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</li> </ul> <p>b. <input type="checkbox"/> <i>(sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</i></p>		
<p>4. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Box No. I Basis of the opinion</li> <li><input type="checkbox"/> Box No. II Priority</li> <li><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li><input type="checkbox"/> Box No. IV Lack of unity of invention</li> <li><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li><input type="checkbox"/> Box No. VI Certain documents cited</li> <li><input type="checkbox"/> Box No. VII Certain defects in the international application</li> <li><input type="checkbox"/> Box No. VIII Certain observations on the international application</li> </ul>		
Date of submission of the demand 29.11.2004	Date of completion of this report 06.09.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Desbois, V Telephone No. +31 70 340-	



## **INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

International application No.  
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**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
    - This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
      - international search (under Rules 12.3 and 23.1(b))
      - publication of the international application (under Rule 12.4)
      - international preliminary examination (under Rules 55.2 and/or 55.3)
  2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

### Description, Pages

1-12 as originally filed

## **Claims, Numbers**

**1-29** as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
  - 3.  The amendments have resulted in the cancellation of:
    - the description, pages
    - the claims, Nos.
    - the drawings, sheets/figs
    - the sequence listing (*specify*):
      - any table(s) related to sequence listing (*specify*):
  - 4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
    - the description, pages
    - the claims, Nos.
    - the drawings, sheets/figs
    - the sequence listing (*specify*):
      - any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes:	Claims	10, 11, 25, 26
	No:	Claims	1-9, 12-24, 27-29
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-29

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

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**Re Item V.**

The following documents are referred to in this communication:

D1 : US 2002/148736 A1 (GEUSIC MARK J ET AL) 17 October 2002  
D2 : US 4318795 (BIANCHI GIUSEPPE ET AL) 9 March 1982

**1 INDEPENDENT CLAIM 1**

**1.1 CLARITY AND NOVELTY**

The application does not meet the requirements of Article 6 PCT, because **claim 1** is not clear. The following features of claim 1 refer to the electrode which is produced, rather than to the process itself :

- (a) coating composition
- (b) surface morphology
- (c) electrode's performance

Therefore, these features will not be taken into account.

A similar remark applies as well for dependent claims 5-9, as the proportions are given for the result of the process (the coating) rather than as process parameters.

In claim 16, in order to be consistent with the description, and with claim 20, "ruthenium" and "titanium" have been considered to be "ruthenium oxide" and "titanium oxide".

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claims 1 and 16** is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parenthesis applying to this document):

A process for the production of an electrolytic electrode having an electrocatalytic coating thereon (paragraphs [0030], [0031]), said process comprising the steps of:  
providing a valve metal electrode base;

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coating said valve metal electrode with a coating layer of an electrochemically active coating on said valve metal electrode base, said coating consisting essentially of mixture of ruthenium oxide, titanium oxide and one or more of tin oxides or antimony oxides (paragraph [0027]).

Therefore **claim 1** does not appear to be new (Article 33(2) PCT).

Document D1 also discloses the electrode manufactured through the process described in claim 1. Moreover D1 discloses an electrode having a coating composition in the following ranges (paragraph [0027]):

Ruthenium oxide : 10-30 mol.%

Titanium oxide : 50-89.4 mol.%

These ranges overlap with the ranges of claim 16

Therefore **claim 16** does not appear to be new (Article 33(2) PCT).

**2 DEPENDENT CLAIMS**

**2.1 NOVELTY AND INVENTIVE STEP**

Dependent claims 2-15, 17-29 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step(Article 33(2) and 33(3) PCT) (See documents D1, paragraphs [0027], [0030], [0031] and D2, examples VII and VIII). Particularly **claims 10, 11, 25, 26** do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The claims attempt to define the subject-matter in terms of the result to be achieved, which merely amounts to a statement of the underlying problem, without providing the technical features necessary for achieving this result.